Takada discloses a system that corrects a print head 1001 for non-uniformity due to manufacturing tolerances or wear issues. The system issues a command to print a test pattern. The system always responds to the command to print the test pattern. The system includes an image reader 1014 that reads the test pattern. The test pattern is analyzed with respect to a reference and correction data is developed to cause a temperature regulator 1113 to control the print head temperature to print an improved test pattern. The system also includes an ejection stabilizing means 1107 that prior to printing the test pattern performs a print head service procedure as described in column 22. Takada does not describe or teach that this service procedure be performed conditionally, based on the level of print quality required by a print job.

Takada does not disclose the step of detecting the operating characteristics of a plurality of nozzles to be used to print the print job as recited in claim 1. Takada merely performs the service procedure described at column 22, which does not include any detection of the operating characteristics of the nozzles. The Office Action incorrectly reads the detecting step on the activity of the image reader 1014. Image reader 1014 merely reads the image of the test pattern. The referenced passage at column 12, lines 51-67, describes a comparison of the read image to a reference image. There is no mention of detecting the operating characteristics of the nozzles.

Additionally, Takada does not disclose the step of printing the print job in the event that the operating characteristics of the nozzles are sufficient to meet the determined level of print quality as recited in claim 1. Takada does not describe any condition based on level of print quality of the print job that must be met before the job is printed. Takada always prints the test pattern in response to the test pattern print command.

With respect to claim 14, Takada does not disclose or teach an ink drop detector for detecting the operating characteristics of the nozzles. The Office Action reads the ink drop detector on Takada's image reader 1014. However, image reader 1014 merely reads the test pattern image. Takada has no teaching that image reader 1014 detects ink drops.

Further with respect to claim 14, Takada does not disclose or teach that the processor is capable of determining that the operating characteristics of the nozzles are sufficient to meet the level of print quality. Takada's processor cannot provide this determination because Takada has no ink drop detector that detects the operating characteristics of the nozzles.

Still further with respect to claim 14, Takada does not disclose or teach that the processor causes printing of the print job in response to the determination of sufficiency of the nozzle operating characteristics to meet the required level of print quality. Takada simply prints the test pattern and does not teach any ink drop detection or determination that conditions the printing of the test pattern.

With respect to claims 3 and 16, the Office Action incorrectly interprets "printmode" as equivalent toTakada's reference density, referring to column 12, lines 58-63. Applicants' specification clearly describes a printmode at page 11 as follows:

> "The concept of printmodes is a useful and known technique of printing a portion of the total drops required for an image in multiple passes." This tends to control bleed and cockle by reducing the amount of liquid that is on page at any given time.
>
> The specific partial printing pattern employed in each pass, and the way in which these different patterns add up to a single fully inked image is known as a printmode."

Takada does not disclose or teach a printmode and, therefore, does not determine the level of print quality from a print mode of the print job as recited in claims 3 and 16.

With respect to claim 6, Takada does not perform a drop detection test to on the nozzles to detect operating characteristics thereof. The passage at column 13, lines 43-

46, merely refers to a possible density correction for groups of nozzles. This has nothing to do with drop detection.

With respect to claims 7-9 and 19-21, Takada does not schedule a maintenance procedure, but rather just performs the service procedure described in column 22.

With respect to claims 12 and 24, Takada does not teach or disclose that the service procedure is performed in the event that the operating characteristics of the nozzles are not sufficient to meet the level of print quality required for the job, but rather just performs the service procedure described in column 22.

For the reason set forth above, it is submitted that the rejection of claims 1, 3, 4, 6-9, 12, 14, 16, 17, 19-21 and 24 under 35 U.S.C. 102(b) as anticipated by Takada is erroneous and should be withdrawn.

The Office Action rejects claims 2, 5, 15 and 18 under 35 U.S.C 103(a) as unpatentable over Takada in view of U.S. Patent No. Pocket Guide to Digital Printers by Frank Cost, hereafter Cost. Cost is cited to show image resolution is a key indicator of print quality. The conclusion of obviousness is erroneous because Takada does not teach or disclose the steps of base claim 1 or the elements of base claim 14, as noted above in the discussion of the rejection of claims 1 and 14 under 35 U.S.C. 102(b).

The Office Action rejects claims 10 and 22 under 35 U.S.C 103(a) as unpatentable over Takada in view of U.S. Patent No. 5,583,547 to Gast et al., hereafter Gast. Gast is cited to show a wiping procedure for inkjet nozzles involving a threshold of a predetermined number of ink drops per nozzle. The conclusion of obviousness is erroneous because Takada does not teach or disclose the steps of base claim 1 or the elements of base claim 14, as noted above in the discussion of the rejection of claims 1 and 14 under 35 U.S.C. 102(b).

The Office Action rejects claims 11 and 23 under 35 U.S.C 103(a) as unpatentable over Takada in view of U.S. Patent No. 5,398,054 to Fukazawa et al., hereafter Fukazawa. Fukazawa is cited as teaching a wiping procedure in the event the inkjet device remains idle for a period of time, referring to column 6, beginning at line 60 and bridging to column 7. This passage merely refers to scheduling maintenance at times "without the attention of the user". This has nothing to do with the idle time of the device. The conclusion of obviousness is erroneous because Takada does not teach or disclose the steps of base claim 1 or the elements of base claim 14, as noted above in the discussion of the rejection of claims 1 and 14 under 35 U.S.C. 102(b).

The Office Action rejects claims 13 and 25 under 35 U.S.C 103(a) as unpatentable over Takada in view of U.S. Patent No. 5,455,608 to Stewart et al., hereafter Stewart. Stewart was cited as showing a repeated spitting of inkjet nozzles. The conclusion of obviousness is erroneous because Takada does not teach or disclose the steps of base claim 1 or the elements of base claim 14, as noted above in the discussion of the rejection of claims 1 and 14 under 35 U.S.C. 102(b).

For the reasons set forth above, it is submitted that the rejection of claims 2, 5, 10, 11, 13, 15, 18, 22, 23 and 25 under 35 U.S.C. 103(a) is erroneous and should be withdrawn.

The Office Action cites a number of patents that were not applied in the rejections of the claims. These patents have been reviewed, but are believed to be inapplicable to the claims.

Newly presented claim 26 recites that the step of printing is carried out without first performing a maintenance procedure. Takada, Fukazawa, Gast and Stewart perform the maintenance procedure first. Newly presented claim 27 recites that the determining step is capable of determining that the print job and another print job may have the same level or different levels of print quality. Neither Takada, Fukazawa, Gast nor Stewart has

this capability. Accordingly, it is submitted that claims distinguish from the cited art and are, therefore, allowable.

Attached hereto is a marked-up version of the changes made to the specification and claims by the present amendment. The attachment is captioned "Version With Markings To Show Changes Made."

It is respectfully requested for the reasons set forth above that the objection to the specification be withdrawn, that the objection to claim 23 be withdrawn, that the rejections under 35 U.S.C. 102(b) and 35 U.S.C. 103(a) be withdrawn, that claims 1-27 be allowed and that this application be passed to issue.

Respectfully Submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Please amend claim 23 as follows:

23. (Amended) The inkjet printing device of claim 14, further comprising a printhead cleaning device, wherein after [said step of plotting] causing said inkjet printing device to print said print job, said processor operates to perform a wiping procedure on said pen utilizing said printhead cleaning device in the event that said inkjet printing device remains idle for a period of time.